



IDAHO PRELIMINARY ASSESSMENT PROGRAM SHORT- AND LONG-TERM PLANNING FOR PRIORITIZING POTENTIALLY CONTAMINATED SITES

INTRODUCTION

The Department of Environmental Quality (DEQ) prioritizes potentially contaminated hazardous waste sites based on the best available information, and long and short-term goals of the Preliminary Assessment (PA) Program. The information DEQ uses to prioritize sites is grouped into the following categories:

- Nature and quantity of hazardous substances at the site
- Potential human and environmental receptors
- Environmental setting of the site and surrounding area
- Programmatic fund availability

The site prioritization process will utilize available information from a variety of sources including interviews, and any data inclusive of previous sampling from a site and/or description of past incidents, spills, leakage at a facility, or chronic contamination such as seepage through mine tailings.

The primary goal of site prioritization will be to initially assess and target sites that warrant a PA based on pre-determined human health and environmental risk criteria. A secondary goal will be to prioritize sites based on the PA work that other federal land management agencies are planning for each impending field season at mixed ownership sites. A tertiary goal of prioritization will be to assure that the level of effort for completing PAs for targeted sites will be optimized in light of the current budget, limited or not, for the respective year.

Initial Program Goals

The DEQ PA 2002 work plan focused on program development and implementation. The DEQ PA 2003 work plan (attached) will focus less on program development and more on honing DEQ's resources for cost effective completion of more PA's. The PA Program will continue to require a prioritization plan and compilation of Site Discoveries, prioritizing sites for PA activities and completion of PAs. In 2003, funding constraints will again limit the number of sites, which can be assessed by DEQ.

Information Sources

Information for the completion of Site Discoveries, and PA prioritization of sites has come from a variety of sources, including but not limited to those described below. Both the number of sources and lists of sites are expected to expand as the program continues into the future. Information for prioritization may have come from other environmental programs such as citizen complaint response, endangered species restoration planning, and Total Maximum Daily Load (TMDL) development. These programs will continue to be tapped for data collected and stored by their implementation staff.

Citizen complaints are the number one sources for initial site inspections by DEQ. Frequently, citizen complaints lead to enforcement actions pursuant to the State's authorities under the Idaho Environmental Protection and Health Act. The same information gathered from interviews of citizens, and subsequent investigations by DEQ complaint responders will be an excellent source for site recognition and completion of a Site Discovery form. DEQ's regional offices and the citizen complaints program will, therefore, play a role in compilation and prioritizing of sites for PAs.

Many sites in the Salmon and Clearwater River Basins, and elsewhere in the State of Idaho have Endangered Species Act implications. There is, therefore, an abundance of site-specific information contained in ESA program databases. This information may be useful for completing of Site Discovery forms, and site prioritization. The information will also help plan data collection during fieldwork for PAs. In sum, the ESA database may be very useful for prioritizing sites and completing PAs.

Compilation of Site Discoveries and PAs may compliment TMDL development, and visa versa. DEQ's TMDL program office contains large databases on water quality, fisheries, population centers, and other watershed information that will be relevant to the completion of PAs. Conversely, the information gathered for the completion of PAs may be able to fill in gaps in data for TMDL determinations where contaminant source inventories are imperative. DEQ's TMDL database will, therefore, be used to prioritize sites and facilitate completion of PAs.

The CERCLIS Data base has been queried to evaluate prospective PA sites. In addition to screening potentially new Sites, DEQ has discovered a number of Sites where PAs have been completed, or are being completed by other agencies and contractors. DEQ will be using this information to provide requested updates to CERCLIS, collect copies of completed or pending PAs, Site Investigations etc.

DEQ's Coordinated List of Reported Remedial Sites (COLORRS) has also been queried for potential PA sites, and is being updated to track those sites for which site discovery has been completed in the PA Program. DEQ is currently working to upgrade COLORRS to reflect site status as determined through the PA and other programs.

Site Discovery Process

Sites have and will continue to be identified and compiled by a variety of means, including those described above. An important resource for this process is DEQ's regional personnel, especially the Remediation Managers and their staff, who may have

specific knowledge of sites that warrant investigation. Sites may include abandoned mines, rural airfields, which have served as a base for aerial spraying, old landfills, illegal dump sites, and abandoned industrial facilities that have known or suspected releases. When sites are identified, a "Site Discovery (Identification)" form will be completed and then submitted to the EPA and DEQ's Program Office for inclusion on CERCLIS, and COLORRS.

Site Prioritization

The site prioritization process is by necessity qualitative, as it is based only on the initial information furnished to DEQ by the sources described above. Prioritization utilizes any and all readily available knowledge of a site, estimates of the potential costs to complete an assessment (based on factors such as remoteness of the site), and the presence of other agencies, who may be working on PAs for mixed ownership sites. Site information, which will be used in prioritization, may include information regarding the projected risks for exposure to hazardous substances which may allegedly be found on each site, through the air, soil, surface water, and ground water exposure routes. Examples of the preliminary information, relative to the type of site, that could be utilized for prioritization are the following:

- **Abandoned Mine Sites**

- Site does or does not include an intact mill
- Type of ore/mineral produced
- Production of greater than "x" amount (for example, 5000 tons)
- Presence of tailings impoundments
- Waste rock piles, and potential for infiltration into and through these piles
- Proximity to "waters of the state" (TMDL concerns)
- On-going releases, such as outflow from audits, into sensitive environments
- Proximity of human receptors or sensitive environments and/or species
- Wind-blown releases to receptors, human and/or environmental

- **Industrial/Business Sites, Urban and Rural**

- Type of facility and description of past operations
- Known or reported releases to the environment, and evidence of migration
- Quantity of releases, if known
- Proximity to receptors with emphasis on schools, day care facilities, etc.
- Proximity to residents
- Water consumption by nearby populations (municipal supply or domestic wells)
- Proximity to sensitive environments and/or species

- **Rural Airfields**

- Types of activities, including a history of pesticide and herbicide aerial application
- Information obtained, through interviews for example, of past storage practices
- Container dump sites, and evidence (soil staining for example) of releases to soil
- Contamination of nearby domestic wells

Based primarily on the best available information obtained during the initial site discovery process, sites have been ranked from those that potentially pose risks and may require immediate evaluation, to those that do not appear to pose any obvious risk. The latter were placed back in the queue for sites which may warrant a PA, but for which more information may be needed to complete a "Site Discovery" and inclusion on CERCLIS and COLORRS. This process should maximize the use of limited funding by first targeting those sites that have the highest likelihood of posing a risk to human health and the environment, and minimizing the number of sites which should not have been assessed under this program.

However, this process will only provide a qualitative framework for comparison and eventual prioritization of sites for the completion of PAs. Other factors that may come into play in the prioritization of sites as PA candidates are, for example, the availability of funds, accessibility of the site and responsible party cooperation, public concern about a site, and other programmatic activities relative to the site.

Completed Preliminary Assessments

The following sites have had site discoveries completed, inspections made, additional PA data generated, and are in the process of having complete PA Reports completed. These PAs will have been formally completed and submitted to EPA by January 31, 2003, with additional copies forwarded to other state and federal agencies for their consideration. We believe this represents a significantly cost effective investment of federal funding.

- Idaho Almaden Mine, Weiser
- Yellowjacket Mine, Yellowjacket
- Tin Cup Mine, Yellowjacket
- Red Jacket Mine, Yellowjacket
- Columbia Mill, Yellowjacket
- South Mountain Mine, Murphy
- Rexburg Airport, Rexburg
- Weiser, Airport
- Princess Blue Ribbon Mine, Fairfield
- Red Elephant Mine, Bellevue
- Camas Mine, Bellevue
- Grace Airstrip, Grace

Potential PA Candidates, and Initial Prioritization

The following sites have been determined to be potential Site Discoveries for inclusion on CERCLIS. The Site Discovery forms (attached) have been completed with available information to the best of our abilities at this time.

Pearl Mining District (multiple AMLs)

Cinnabar Mine

Thunder Mountain Mine

Dewey Mine

Taylor Aviation (multiple rural airstrips)

Idaho Department of Lands Gowen Field Landfill

The list above is our best estimate of the sites that will warrant a PA evaluation this year, based on the factors discussed under the “Site Prioritization” section, but also inclusive of accessibility and funding considerations. For long term planning, keep in mind that the prioritization process is an iterative, evolving process under which we expect change to occur as experience accumulates, but always the results being the continuing evaluation of significant sites in terms of potential impact to human health and the environment.

State of Idaho, Department of Environmental Quality
Preliminary Assessment Work Plan
January 2, 2003, through December 31, 2003

Task 1. Preliminary Assessment Site Screening

- Output 1A: DEQ will be reviewing and revising, as necessary, its screening protocols for potentially contaminated sites, which should be evaluated by preliminary assessments and hazard ranking under the Comprehensive Environmental Response Compensation and Liabilities Act.
- Output 1B: Using DEQ's Comprehensive List of Remediation Sites (COLORS) and the established screening criteria, DEQ will select a cross section of candidate sites
- Deliverables: Screening protocols will be outlined and discussed in the annual status report submitted to EPA in January 2004.
- COLORS Data Base will be updated reflecting the current status of sites screened and evaluated.

Task 2. Preliminary Assessments

- Output 3A: Using established preliminary assessment protocols DEQ will complete existing data and field reviews of potential hazardous waste sites.
- Deliverable: DEQ will complete and submit a comprehensive Preliminary Assessment Report on each site to EPA prior to DEQ's final status report in January 2004.

Task 3. Training

- Output 4 A. DEQ will provide the appropriate levels of Preliminary Assessment, Site Investigation, Hazard Ranking System, Personnel Protection and Safety training for personnel complete all tasks under this cooperative agreement.
- Deliverable None